How to make colloidal silver

There is a method of protection against many infections that is inexpensive and can be very effective. The method involves the use of colloidal silver, which is a suspension of very, very small particles charged with pure silver suspended in distilled water.

Making colloidal silver: Roughly speaking, all that is needed is to apply a DC voltage to two electrodes made of 99.99% pure silver, placed in medical grade distilled water. The smaller the current flowing through the water, the smaller the size of the silver particles suspended in the water, and the smaller the particle size, the more effective the colloidal silver.

Basic Method:

To keep the current low, you can use a 5-volt battery consisting of four 1.2 V Ni-Mh AA size rechargeable batteries in a battery box. Connect the battery to the silver electrodes in a beaker of medical grade distilled water. During the process, the water is stirred with a glass rod, although plastic or wood can be used, but not metal, as it would react with the charged silver particles. After a few minutes, the silver wire that is connected to the negative terminal of the battery will be coated with a black substance. It has to be cleaned. You can use a sterile cotton swab for this, while I use a clean tissue for cleaning. As time goes on, the rate at which the black coating develops increases, as the water is much more capable of carrying the battery current. Do not use any chemicals to clean the silver, water purity, 9999 silver is vital and glassware must be used. The silver wire connected to the positive terminal of the battery develops an opaque gray layer that must be cleaned from time to time. The final product should be transparent and look like water. If the colloidal silver is illuminated with a laser light, such as from a conference pointer, the appearance is very nice, as thousands of tiny flashes are illuminated as the light reflects off the silver particle, and then the actual concentration of silver particles in the water can be determined using an inexpensive TDS PPM meter that gives a reading in parts per million.

It can use 27 volts continuously with a 3x9V battery. The current flow through the distilled water depends largely on the distance between the electrodes. The farther apart the electrodes are, the lower the current for a given voltage.

First, the colloidal silver produced in the above process is not good for internal use. It will not cause any harm, but the silver particles released by the silver wires are too large to penetrate bacterial or viral cells. Silver particles must be a few nanometers in size to penetrate cell membranes. The smaller a silver particle is, the more effective it is.

More advanced method:

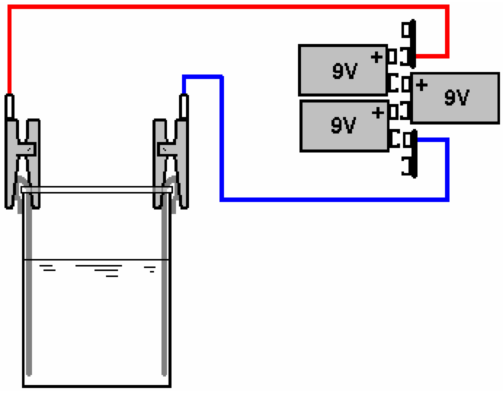
The operating current should not exceed 0.155 milliamperes per square centimeter of an immersed electrode. So, for example, if each electrode has 3 square centimeters of submerged surface area, then the maximum current should be three times the 0.155 mA figure, which is 0.465 milliamps. If more than that is supplied, the resulting silver particles will be too large to be fully effective.

Since the current is so low, using three 9-volt batteries is a good idea, although a small mains unit could be used if its output voltage is high enough (e.g., 30 volts). In this circuit, resistor R1 controls the amount of current that will flow in the circuit and resistor R2 must have a value ten times that of R1. For example, if the desired current were 3 milliamps (0.003 amps) then resistor R1 would have a value of 0.134 divided by our desired 0.003 amps, giving us a resistor value R1 of 44.7 ohms. This is not a standard resistor size, so the next highest value is chosen (since we do not want to exceed our chosen current) and that would be a 47 ohm resistor and since R2 is ten times larger, we would use a 470 ohm resistor. It is recommended to use resistors with a 5% tolerance. Since the circuit power is trivial, any resistor power can be used, and the 1N4148 diode shown can in fact be any small-signal silicon diode.

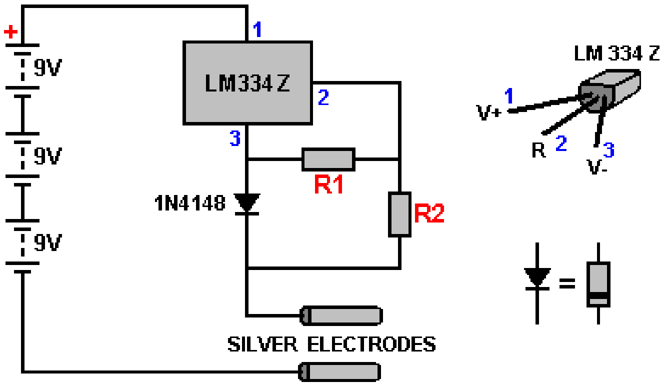
Some example results are:

R1 = 1K, R2 = 10K, current = 0.13 milliamps.
R1 = 100 ohms, R2 = 1K, current = 1.38 milliamps.
R1 = 47 ohms, R2 = 470 ohms, current = 3.02 milliamps.

Basic method



Advanced method



Quantum Method: Applying UV light 420 nm during electrolysis
The ultraviolet light acts in a quantum fashion. During the initial electrophotochemical process, bulk silver is extracted atom by atom from the silver anode by current flow from the cathode. In this process, the atoms lose their unpaired valence electron and, in doing so, become silver ions. The valence electron remains in the water as a hydrated or solvated electron held captive by the dipolar nature of water molecules. Normally, the second phase will cause the silver cations to be attracted to the cathode, except for the simultaneous irradiation of violet light photons that collide with the hydrated electrons. The energy of the photons is transferred by forming a virtual particle called a photoelectron. This provides an escape and return site on the silver cation which instantly becomes a neutral silver atom that requires bonding to another neutral silver atom and forming a dimer for stability. Thus, it is a matter of temporarily removing an electron from the metallic silver and then putting it back again. This process decreases the levels of ionic silver, which is not as efficient, and increases the level of pure colloidal silver, also in the dimer form, which is the smallest and most efficient. Manipulations like that inside atoms are, by definition, "quantum physics".

Conservation:
Our colloidal silver must be protected inside some glass bottles that must be dark or black. We need to keep them hermetically sealed. They should be placed in a place free of light, fresh and if possible far from any electrical appliance. It is not recommended to keep them in the refrigerator. Before each application we must shake our bottle. We can also use a borosilicate glass rod to stir the colloidal silver. Never use metal bottles or metal utensils to handle the silver. Colloidal silver has a long shelf life if kept in optimal conditions ranging from 6 to 12 months.